

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,458	10/25/2005	Mari Wakita	71,051-006	3047
27305 7590 04/23/2007 HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101			EXAMINER	
			MOORE, MARGARET G	
	VARD AVENUE HILLS, MI 48304-51	51	· ART UNIT	PAPER NUMBER
,			. 1712	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	NTHS	04/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Assistant Communication	10/530,458	WAKITA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Margaret G. Moore	1712				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•	•				
1) Responsive to communication(s) filed on						
·= ·	-· action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1 to 7 is/are pending in the application						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 4</u> is/are rejected.						
7) Claim(s) 2.3 and 5-7 is/are objected to.		•				
	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers		•				
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b) Some * c) None of:						
1. Certified copies of the priority documents	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) Interview Summary (PTO-413) Paper No(s)/Mail Date.					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 	5) Notice of Informal Patent Application					
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/530,458 Page 2

Art Unit: 1712

1. Claim 1 is objected to because of the following informalities: The word "polydimethylsiioxane" is a misspelling. Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Brooks.

Brooks teaches mold release compositions that contain a propyl substituted silicone resin and a dimethylsiloxane oil. See the abstract. Column 4, line 21, teaches an oil viscosity of 50 cps and Examples 10, 12 and 13 use such an oil. This meets claimed component (A). The resins are disclosed as containing residual alkoxy groups (column 1, lines 55 to 60) and will contain residual hydroxyl groups as a result of the hydrolysis preparation. See for instance Example 1 which recites the hydroxyl content. This meets the resin (B). Brooks discloses both of the claimed components and, though not shown in combination with one another, it is clear that they are intended to be used in combination with one another. This is a sufficient basis upon which to conclude that Brooks anticipates the claimed composition.

On the other hand, see Example 10 in which a dimethylpolysiloxane fluid having a viscosity of 50 cps is used in combination with the silicone resin of Example 5. Again, the resin in Example 5 will contain alkoxy groups. In addition, residual hydroxyl groups will be present in the resulting silicone resin. This is evidenced by Example 1 and, in addition, the skilled artisan would recognize this fact as a direct result of the hydrolysis reaction. As such the compositions in Examples 10, 12 and 13 anticipate the instant claim.

For claim 4, it is unclear if naphtha is embraced by the term liquid paraffin or not. Liquid petrolatum (i.e. liquid paraffin) is a liquid obtained by distilling petroleum fractions. Naphtha is a petroleum distillate. Reading the term "liquid paraffin" as including

Application/Control Number: 10/530,458 Page 3

Art Unit: 1712

naphtha, please see column 5, line 7, which teaches naphtha as an organic solvent for this composition. On the other hand, Example 5 dilutes the silicone resin with naphtha. This meets the requirement of claim 4.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks in view of Adams et al.

Brooks generally teaches various solvents, including hydrocarbon solvents, for use in the silicone mold release composition. Adams et al. also teach various hydrocarbon solvents for use in a silicone mold release composition. Please see column 4, lines 34 and on. This teaches that hexadecane, a hydrocarbon solvent that is also a liquid paraffin, can be used in the alternative with various solvents such as toluene, xylene and benzene - all three of which are taught by Brooks. It is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. The express suggestion to substitute one equivalent for another need not be present to render the substitution obvious.

One having ordinary skill in the art would have found the use of a liquid paraffin solvent in the composition of Brooks to have been obvious since such solvents are known to be used in the alternative, as an equivalent, with other solvents that are taught by Brooks. Obviousness is enhanced by the fact that Brooks teaches, generally, that hydrocarbon solvents can be used.

6. Claims 2, 3 and 5 to 7 are objected to as being based upon a rejected base claim. These claims are neither taught nor suggested by the prior art. There is nothing

Application/Control Number: 10/530,458 Page 4

Art Unit: 1712

to indicate an excess of silanol group compared to alkoxy groups. In fact, Example 1 shows significantly greater alkoxy than silanol groups. There is also nothing to suggest an alkoxy group of from 3 to 8 carbon atoms. All of the hydrolysis reactions occur in methanol and patentee simply provides no motivation to use any other alcohol. In addition, the specific resins of claims 5 and 6 are not rendered obvious by the teachings in Brooks. Finally there is nothing that would suggest the application of the composition therein to a fiber yarn.

- 7. The remaining references are cited as being of general interest. Lange teaches a skin preparation that includes a propylsiloxane resin (column 5, lines 65 to 76) but there is nothing to indicate that there are both hydroxyl and alkoxy groups in this resin. Both Standke et al. references teach propylsiloxanes but fail to teach or suggest the component (A). Kobayashi et al. and Griswold et al. both teach resin compositions but both fail to specifically show a propylsiloxane having both alkoxy and hydroxyl groups.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/530,458

Art Unit: 1712

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary/Examiner
Art Unit 1712

mgm 4/19/07